
Vrushali A. Bokil

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Education:

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| Ph.D. | Candidate in Mathematics, University of Houston |
| M.S. | Mathematics, New Mexico State University, May 1996, GPA 3.87/4.00 |
| M.Sc. | Applied Mathematics, Indian Institute of Technology, Bombay, India, July 1993
<i>Thesis: Mathematical Modeling of Chemical Process Using the Equation oriented Approach. (May 1993)</i> |
| B.Sc. | Mathematics, Fergusson College, University of Poona, Pune, India, 1991 |

Research Interests:

- Partial differential equations, Maxwell's equations
- Numerical Analysis

Work Experience:

- Graduate Research Assistant: Summer 2000, T-7, Los Alamos National Laboratories(LANL), Los Alamos, NM 87545. I worked with Michael Buksas on *An Application of the Uniaxial Perfectly Matched Layer (PML) Technique to the Truncation of Finite Element Meshes*.
- Graduate Research Assistant: Summer 1999, T-7, Los Alamos National Laboratories(LANL), Los Alamos, NM 87545. I worked with Michael Buksas on *the Perfectly Matched Layer (PML) Technique* in Electromagnetics and its Implementation in the PDEUM(PDE Unification Modules) Framework, which is a C++ software library developed at LANL.
- Instructor: Department of Mathematics, University of Houston, Houston, TX. Fall 1998 - Spring 1999. I taught finite mathematics to undergraduate students in business, social sciences and the life sciences.
- Instructor: Department of Mathematical Sciences, New Mexico State University, Las Cruces, NM. August 1995 to Spring 1998. I taught a number of undergraduate courses in Mathematics which included calculus for technical students and business majors, Matrices and Linear Programming and College Algebra.
- Research Assistant: Department of Electrical and Computer Engineering, New Mexico State University, Las Cruces, NM. Summer 1995. I Researched current literature on Perfectly Matched layer boundary conditions for applications in electromagnetics. Authored a report titled *The PML technique for the reflectionless absorption of electromagnetic waves*.
- Research Assistant: Department of Chemical engineering, Indian Institute of Technology, Bombay, India. July 1993 - December 1993. Performed literature survey in the area of Differential-Algebraic equations. Authored a report titled *Introduction to Differential Algebraic Equations*.

Skills:

C/C++ programming, Unix, Matlab, Maple, MPI